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FEBRUARY, 1901.

"Æquam memento rebus in arduis
Servare mentem."—*Horace,* Book ii, Ode iii.

Bowater John Vernon.

MANY of our readers will have heard with regret of the death of Mr. Bowater John Vernon, who for thirty years filled the post of one of the two ophthalmic surgeons in the Hospital. He will probably be better known and better remembered by the later generations of students than by those who joined the school soon after the department of ophthalmology was instituted. There was, indeed, never any lack of house surgeons or of dressers; but in those earlier days attendance in the ophthalmic wards was not compulsory, and consequently they were visited by few except by those who could spare an additional year to acquire some knowledge of the eye, ear, and throat. The regulations of the College, as well as the not infrequent introduction of questions on the anatomy, physiology, pathology, and treatment of diseases of the eye, led to great changes in this respect. Of late years most men spent some time in the wards, and the personal appearance of Mr. Vernon was as well known as that of any member of the staff. Of moderate height, with head well set on his shoulders, dark complexion, with deep lines on the face and below the lower lip, a most mobile and expressive mouth, a high well-proportioned forehead, and scanty dark, almost black hair, he gave the impression at first glance of being a feeble and delicate man; but upon closer acquaintance it was seen that he had fair breadth of shoulder and strongly made limbs, and little surprise was felt when it was learnt that as a boy at Marlborough he obtained a well-earned reputation as an athlete, proving victorious in many a short distance and hurdle-jumping race.

Mr. Vernon was the second son, in a family of nine, of the Rev. John Vernon, who was for twenty-seven years Vicar of Westfield, an ancient Sussex parish near Battle. He was born in 1837, and died January 28th, 1901, his life therefore just covering the period of her late Majesty the Queen's reign. After the completion of his education at Marlborough he became a pupil of the late Mr. Jowers, of Brighton, at the Brighton Hospital, under whose tutelage for three years he familiarised himself with the general aspects of medicine and surgery. He then entered at St. Bartholomew's Hospital, and after the usual three years' attendance upon lecturers was appointed house surgeon for a year to Mr. Wormald in 1862, and for the following year house surgeon to Mr. Paget. In 1862 he took the Hospital Scholarship, and in the same year passed the Membership Examination of the College of Surgeons, and the Licentiateship of the Royal College of Physicians. In 1864 he passed the Fellowship Examination of the College of Surgeons. In the meanwhile he had acquired so good a knowledge of anatomy, and was so clean and excellent a dissector, that he was elected Demonstrator of Anatomy, which post he held for several years. His student career may therefore be regarded as one of unusual distinction

and success. About this time his attention was directed to the eye, and he attended the practice of the Royal London Ophthalmic Hospital, where he was soon appointed Clinical Assistant to Mr. Wordsworth. After the retirement of Mr. Baden he became Curator of the Museum, and Pathologist to the Hospital.

These posts brought him into immediate relations with the best and most skilful ophthalmic surgeons of that day —with Sir William Bowman, Mr. Critchett, Mr. Hulke, and others of equal renown, from whom he learned many niceties in the delicate art he practised, and became an excellent judge and critic of the operative abilities of others. Whilst admiring, as all did who witnessed them, the operations of Sir William Bowman, he highly appreciated the manipulative dexterity of Mr. Hulke, whose hand, he would say, "though large was as steady as a rock."

The Ophthalmoscope, which had not long before been devised by Helmholtz, had opened up an entirely new field of ophthalmology, and was attracting great attention on all sides. Mr. Vernon naturally soon became an adept in the use of this instrument. He had then also the opportunity of seeing new operations like iridectomy, the linear operation for the extraction of cataract, and various operations for the relief of lachrymal obstruction performed by masters of the art of surgery. It was not surprising then, when the need for some one skilled in the knowledge of diseases of, and operations on, the eye began to be felt at St. Bartholomew's, in the interests both of the patients and of the students, that Mr. Vernon should be elected as Demonstrator of eye diseases in association with Mr. Callender. The importance of the department was immediately perceived, and the Governors determined to build two eye wards, one for males and one for females, over "Casualty," which were completed in 1870, and opened by the then Prince and Princess of Wales in the summer of that year. Mr. Vernon and myself were appointed respectively junior and senior surgeon, with twenty-six beds and a child's cot to be divided between us. The arrangement proved a fortunate one. The two surgeons worked together in the most amicable way, sometimes one, sometimes the other monopolising the wards, whilst in cases of emergency a bed could still always be found—through the address of Sister Alexandra, to whose kindly offices, untiring assiduity, and admirable management of her wards both were always willing to admit they were deeply indebted.

Mr. Vernon was an original member of the Ophthalmological Society, which was founded in 1880, but he scarcely attended any of the meetings, the late hours being uncongenial to him. He was a member of the staff of the Great Northern Hospital, and was for twenty-seven years ophthalmic surgeon to the West London Hospital, in the affairs of which he took much interest.

As an ophthalmic surgeon and as a clinical teacher he was in all respects admirable. Constant in attendance, he rarely kept his class waiting for a moment. Considerations of light led, as a rule, to the operations which had been decided on previously being at once undertaken. As soon as the patient had been wheeled in, and whilst chloroform was in course of administration, he would give a short history of the case, call the attention of the class to the salient points which it presented, state the different methods of treatment that had or might have been adopted, and gave the reasons for the particular operation he was about to perform; then after a careful examination of his instruments, and satisfying himself of their sharpness and cleanliness, he proceeded to operate. He was then seen at his best. Clearly recognising what had to be done in each case, every cut was accurately limited, every closure of the scissors did what was required and no more. He was really a beautiful operator, and this was the more meritorious in him, that his wrists were often swollen with rheumatism and very tender and painful. For the most part his cases were highly successful. His talents as a teacher were not less conspicuous. As soon as the operations were over he entered the wards which adjoined the operating room, and in each case would find something of importance to dwell upon, some useful bit of knowledge the thoughtful student might carry away with him and garner up for future use. Finally the out-patients had to be seen, which often occupied two hours more, yet at the close he was as calm and deliberate, as willing to answer questions as if he had just entered the hospital. He was an ideal teacher. His energy, however, seemed to be exhausted with teaching and hospital work, for although he wrote a few articles in the *St. Bartholomew's Hospital Reports* in 1870 and 1871, he apparently was unable to make any effort to collect or comment upon the cases that had passed before him, after the latter date. This is to be especially regretted as his style was good; he was well read, and he had large experience.

His talents as a microscopist were scarcely sufficiently appreciated. His knowledge of the technique of the microscope was greatly improved by his practice as curator at the Moorfields Ophthalmic Hospital, but apart from this the instrument was at all times a source of infinite pleasure and gratification to him. He was fond of flowers, knew most of the English plants by name, and throughout the summer and autumn rarely appeared without a fresh flower in his buttonhole, which he cherished with particular care and complacency. His kindly disposition was displayed in his love for animals, and both dogs and birds shared his attention to an almost equal degree. His principal recreation was a day's shooting in September, and the opportunity of enjoying it was always given to him with the warmest of welcomes by his old and attached friend, John Henry Salter, of Tolleshunt d'Arcy.

The end came suddenly. He had seen his patients at the

Hospital on Saturday, the 19th January, but on the following day some kind of cardiac spasm, with dyspnœa, supervened, and he placed himself under the care of Dr. Attlee. But neither skill nor attention—and he had both to aid him—could stay the inevitable hour, and he died on the 28th January. His body was committed to the grave on the 1st February, when the guns of the war-ships in the Solent were proclaiming the passage of the Queen, to whom he was so intensely loyal, to her resting-place at Windsor.

He, too, has gone to his rest; and he may well have thought, in the solemn moments that precede dissolution, that he had worked honestly and truly to the best of his ability for the good of the great Hospital to which he belonged, and that he bequeathed to those who succeed him a shining example of that gentleness, courtesy, and rectitude of purpose in his relations alike with his friends upon the staff and with the patients of the Hospital, which has in the past, as we may well hope it may continue to do in the future, made St. Bartholomew's so useful and so great an institution in the history of this country.

HENRY POWER.

Medicine and Surgery in Primitive Culture.

By F. C. SHRUBSALL, B.A., M.B.(Cantab.).

THE early history of the medical profession is a subject of great interest, but unfortunately one for which but few materials are available; a few inscriptions, implements, and osteological remains being all that are left to serve as a link with the past. If, however, these be supplemented by the descriptions of reliable authorities of the methods of medicine and surgery in vogue among savage tribes in various stages of primitive culture, we can build up a skeleton framework which in all probability gives some idea of the genesis of the healing art. In the following columns will be found recorded a few notes compiled from various sources dealing both with prehistoric and contemporary savage medicine. As we all know, our profession is a very ancient one, and its origin is lost in the mists of time, but we may believe it was coeval with man himself, as no tribe is known some members of which have not a special reputation for skill in treating those suffering from the effects of injury or disease. Such individuals, from their powers or supposed powers of alleviating suffering, come to be regarded as possessed of supernatural skill—an idea still prevalent in present-day London; consequent upon this the profession has almost always been looked on with wholesome feelings of dread, if not of respect. Probably the lowest ebb of reputation was reached in this country between the twelfth and seventeenth centuries, when it appears to have been safer for a patient to treat himself, or to be treated by his female relatives, than to trust himself to the untender mercies of the village leech or barber-surgeon. The corresponding high-water mark, so far as I can discover, was reached among the Hindus about five centuries before our era, when the author of one of their religious books records the following anthoritative dictum:—"Whosoever rejects a physician shall be punished in hell, but whosoever employs a physician shall enter paradise, even though he see not the sacred Ganges in his dying moments." Lest we should all feel unduly elated, I hasten to add that the same gentleman also records, "The practitioner who knows the use of quicksilver is like a god; one who knows the qualities of roots and herbs is like a man; whereas one who knows the use of the knife resembles a demon." Passing on to describe a physician, our author says, "The physician should possess a healthy body, he should keep his nails and beard cut short, his body pure, and his clothes clean. He should possess a good memory, and be always amiable, cheerful, and collected. His language should be mild, candid, and encouraging, rather like that of a friend than an acquaintance. He should possess a character for strict veracity, calm temper, and the greatest sobriety and chastity. As a person may be afraid of his father, mother, and friends, but not of his physician, so must the physician be more kind and considerate than any of these. A good physician will continue to visit his patients diligently, examine them carefully, and give medicines always when the patient can live; but if a physician attempts to treat an incurable case it will diminish his reputation, friends, and riches." After this high standard set up for the practitioner long before our era, it may be of interest to read his description of the ideal student of that day. "In all cases the student should be the son of a respectable and ancient family, who is either the son of a practitioner, or one who respects the medical profession. He should be inquisitive and observant, not covetous or lazy. He should possess a generous heart, and his disposition should be amiable and happy. The indications of such qualifications are an agreeable voice, small tongue, eyes and nose straight, with thin lips, which do not expose the gums, and thick hair, which retains its vigour." Having thus briefly narrated the ideals of one of the leading medical schools of former civilisations, I will pass further down the cultural scale. What is the earliest evidence we possess of the practice of the healing art?

In point of time we must start from the early neolithic age in Southern France, a skull with a circular hole in it, obviously produced before death, the injury not proving fatal, having been found in the Caverne de l'Homme Mort, in the valley of the Lozère, amidst remains certifying to the date of the deposit. The hole could not have been produced by a single blow from any known weapon in use at

the time, and agrees in form and appearance with those produced by comparatively modern savage operators. So far as we can judge from history and contemporary savage medicine, our profession has passed through somewhat the following stages:

First, a stage of purely empirical and experimental treatment of injury and disease by the patient and his immediate relatives.

Secondly, a stage in which certain individuals acquired special skill, and were consulted by sufferers.

Thirdly, a stage in which these individuals were credited with supernatural powers, and consequently were respected and feared by their neighbours. They were thus enabled to lead a life of, comparatively speaking, luxurious ease. To encourage this they doubtless spread abroad freely the idea that all disease is due to the action of evil spirits, who required propitiation, and that as they were the only people who understood the said spirits, all gifts and offerings must pass through their intermediation. Priestly and medical functions for a time remained merged, and then the latter became more and more dropped. During this period other members of the tribe doubtless continued to treat empirically for themselves with well-known simples and methods all easily yielding ailments, assigning all resistent or incurable affections to the malignant action of evil deities, to be appeased by sacrifice and the like.

During the next period the study of medicine got almost entirely forgotten in a maze of theological wrangles, and such progress as had been made was largely lost sight of. As an example of this we have only to consider the state of the rank and file of the profession in Europe between A.D. 450 and A.D. 1450.

Finally, in Europe, as we know, empirical medicine gradually reasserted itself upon an apparently firmer foundation. In the few other civilisations we can study, it would seem that stage four has lasted to the present time, or that while in this stage of culture the whole civilisation was swept away. The whole subject is so vast that in a short note it is only possible to pick out isolated facts here and there, the first two, and to a less extent the third, of the stages into which I have divided medical culture being of the greatest interest.

It is very doubtful if definite hospitals exist, or ever existed, among primitive man. In savage America the patient was taken to a large adobé hut or shed for the medicine men to hold a consultation, and dance around him. Among many primitive races the women at the time of childbirth are regarded as unclean, and are compelled to resort to certain huts, mounds, or wigwams specially set apart for the purpose, and where they are attended to in labour by those of their own sex. These may be regarded as the precursors of Martha Ward or Queen Charlotte's.

In India, Ceylon, and Assyria, amidst far higher stages of culture, hospitals existed in which the sick were tended, operations performed, and students educated in quite a modern fashion. Incidentally it may be noticed in passing that in Assyria the profession formed a great State department, as is our Local Government Board at the present day. At that time before a physician would visit any patient an order from the king had to be obtained. In a table case in the Nineveh Gallery of the British Museum is the following letter, written about B.C. 1140:—"To the king, my lord, from thy servant Shamesh-mita-muballit.—Greeting unto the king, my lord. May Nahi and Marduk be gracious and propitious unto the king, my lord. The lady Baugamillat is grievously sick, and unable to eat. Now let the king, my lord, give the order for a physician to come and see her." Unfortunately no more is known of this case, although there is in our national collection a letter thanking the king for sending a physician to another citizen, who quaintly expresses himself thus:—"For I was dead, and the king, my lord, hath made me to live, and his kindness toward me is exceeding great."

After the foregoing brief review of the status of the medical man it is interesting to consider his practice, which may conveniently be divided into two parts, real or practical, and mystical, the former only being of any clinical interest. In the first place, dealing with medicine, it is found that with the exception of recent synthetic products almost every individual drug in our pharmacopœia is in use among some savage tribe or other. The great size of the United States Pharmacopœia is due to its inclusion of all known native vegetable remedies in former use in the States. As examples of adoptions of savage drugs, note—

Calumba from the forests of the Zambesi and the east coast of Africa.

Jalap from Mexico, named after the Otomie city of Xalapa.

Cinchona from Peru.

Guaiacum and quassia from the West Indies.

Copaiba from the Amazon valley, etc.

Our methods of medication and of preparing drugs differ only in small details from those of savage man. Infusions and decoctions of all kinds are of course in universal use, as also are hot fomentations for wounds and painful swellings, *e. g.* the natives of Central Sumatra find a fomentation of tobacco leaves in warm oil applied to the breast very efficacious in cases of asthma; the aborigines of South Australia apply warm fomentations of the leaves of the blue gum to relieve the tenesmus of severe diarrhœa, while warm fomentations and hot smoke baths are applied to joints affected with chronic rheumatoid arthritis by the Karok Indians of Northern California. Embrocations and massage with fats and oil are largely used by savage man throughout the world, palm oil being the favourite in the tropics, and train oil in northern latitudes.

Purgatives, and even enemata, are very generally employed, the most interesting of the former being live larvæ of bees

fresh from the honeycomb, taken by the Mincopies of the Andaman Islands when constipated.

Emetics, both medicinal and mechanical, are very popular. The Dacotas tickle the fauces with a bird's feather, while the Karyas of Brazil cut a stick obliquely at one end, fire-harden it, push it well down the throat, and twist it round and round until the desired effect is produced.

Inhalations of the smoke of various plants (tobacco, datura, and the like) are in vogue as a treatment of headache, epilepsy, coughs, and colds in Siberia, Dacota, Brazil, Ashanti, and Abyssinia. Venesection is not uncommon, and is performed by very varied methods. The natives of some of the Malayo-Melanesian Islands shoot at the patient with a small bow and arrow until a suitable vessel gets opened; the Navajo and Chippeway Indians make a small incision into a vein, and suck up blood through the hollow bone of an eagle.

Cupping is in use as a treatment of fever, neuralgia, and pulmonary affections throughout Africa, Malaysia, and among the Creek and Dacota Indians of North America. A common method is to apply a cow's horn broad end to the skin over the affected part, and to suck out the air through a small hole in the tip afterwards closed with clay. In Morocco the method employed closely resembles that in present use, grass being burnt inside the horn as it is applied to the skin. Wet-cupping instruments have been found among relics from early Egypt.

Massage is a popular form of treatment throughout Asia, and was commonly employed in Greece before the time of Hippocrates.

Baths of all kinds, particularly hot baths, mud baths, and vapour baths, are considered of high therapeutic value by many savage tribes. The Maori of New Zealand and the prairie Indians of North America alike journeyed to the hot springs of their respective countries to undergo definite courses of hydrotherapy. In New Zealand the treatment continues unbroken to the present day, though now the Briton and not the Polynesian avails himself of the indifferent thermal baths, mud baths, alum baths, sulphur baths, and oil baths provided by nature in generous profusion. The natives highly esteemed the remarkable effects of these in cases of skin disease, rheumatism, and "fits," by which epilepsy was probably meant, although the term may have included various uræmic manifestations. In the hinterland of Venezuela the patient lies in a hammock over a series of red-hot stones, on to which a little water is poured, so that he or she is kept enveloped in steam; among other tribes of the same continent the system is more developed, and special buildings are constructed for the provision of hot air and vapour baths.

Primitive surgery appears to be and to have been conducted on a large scale, and often in a very skilful manner. As regards prehistoric man our records are, of course, scanty, and limited to operations on the osseous system, the only part of the human frame which resists the action of time and decay to preserve the records of our ancestors for our use. We find that they performed various operations of the nature of trephining and osteotomy, and also set fractures, usually indifferently badly.

Anæsthetics are apparently unknown, but in isolated cases various alcoholic intoxicants are administered to stupefy the patient prior to operating, *e.g.* in Uganda banana wine is given before performing Cæsarian section; in some of the islands in the Pacific it was given before trephining. Among the Indians of North and Central America the patient smokes dried leaves during an operation to divert his attention, to some extent, from his physical sufferings. There is one reference in Hindu literature to a surgeon who flourished about 500 B.C., and is said, by administering a drug, in a manner not stated, to have caused a patient not to feel during the performance of laparotomy upon him. The accounts given by various writers of certain potent anæsthetics in use in Central America are, as far as I can gather, baseless, and to be relegated solely to the pages of fiction.

Probably antiseptics are quite unknown to savage man. I can find only one instance of their deliberate use, viz.—before performing laparotomy in Uganda it is customary to wash the patient's abdomen, the instruments, and the hands of the operator in banana wine, which contains enough alcohol when well fermented to enable it to burn. After this all are again washed in clean water. Savage man generally is not afraid of washing, and it is usual for wounds to be thoroughly washed with water as a preliminary to treatment.

To arrest hæmorrhage several methods are employed, which can be classified into three heads:

1. The actual cautery, the use of which seems to be universal as the last resource in severe cases.
2. Pressure on the surface of a wound, the lips being as well as possible brought together, and the whole bound up with leaves, bark cloth, and the like.
3. The addition to the wound of fine foreign particles increasing the rate of clotting of the blood, and so naturally leading to pressure on the bleeding area; hot coffee dregs, thistle down, cotton fluff, being employed in the various districts in which they are to be found. Ligature of vessels seems to be unknown to uncivilised races.

Among certain Brazilian tribes the pincers of ants are said to be used as sutures, the edges of a wound being held together, an ant placed against the lips, which it promptly nips, and the body being torn off the pincers maintain their hold. Among the Fans sutures of pineapple fibre are inserted by means of a bamboo needle.

In Uganda after a laparotomy the abdominal wound

was closed by driving seven or eight long polished iron nails through the walls, and binding these in a figure-of-8 fashion with fibre, as is done in the case of acupressure needles. Schoolcraft said that the Indians of the American prairies sewed up wounds with fibres of lime tree and tendons of deer or bison.

The Winnebago Indians pack wounds so as to make them granulate up from the bottom.

In Australia pressure is applied by means of resin, but if the wound becomes warmer, tender and throbbing, they reopen it.

Dr. Bartels narrates an interesting case of a certain North American Indian chief, who received a severe thoracic wound, which bled severely until a cough drove a piece of lung into the wound. The faculty of the village were amazed, and after long consultation decided to leave the lappet of lung in the wound, but to cut off the part which projected beyond the level of the skin; this projecting portion was to be fried and eaten by the patient. Under this treatment, strange to relate, healing by granulation occurred and all went well.

Amputations are rarely performed by uncivilised man.

The Loyalty Islanders attempted at one time to remove injured fingers with a hammer and chisel, but the results were so bad that the practice was abandoned.

In Africa it is common for the hand to be hacked off at the wrist without any attempt at flaps, and the stump plunged in boiling pitch to stop hæmorrhage. Such is only done for penal purposes.

Hernia constitutes a great puzzle to our more primitive brethren; most tribes, finding fomentations will not cure, try pressure, sometimes effecting temporary reduction. In Morocco, trusses made of leather, sticks, and iron balls are used.

Abscesses are usually opened where they point, and then washed freely. After this, in South Australia hot ashes are applied to the base, while in North America it is cauterised with a red-hot brand.

Dislocations are almost beyond the powers of the savage faculty, but it may be recorded as of interest, that among the Nias Islanders only those born by breech presentations are allowed to manipulate these injuries. For fractures, splints are in general use, and are usually padded with various materials, and worn until complete union is re-established. Many tribes, however, are quite ignorant of the advisability of preliminary extension before applying the splints. The natives of Australia treat fractures by extension of the injured limb, which is maintained while moist clay is moulded round the limb, then hardened in the sun, and worn until union is complete. The results of this method are usually excellent. Fractured jaw is treated by extraction of a tooth and then moulding clay all round the chin and face, which is kept on for some weeks, the patient being fed with liquid food through a reed inserted in the gap left by the extracted tooth.

Ritual operations are very common among races in a low grade of culture, and comprise circumcision and external urethrotomy on the male; clitoridectomy, sewing up of the labiæ, splitting of the perinæum, and even oöphorectomy on the female. Lithotomy is practised in Ashanti, China, and Rajputana. A finger is introduced into the rectum, the stone pressed forward from within against the perinæum, at once cut down upon in this situation and removed with the fingers. After-treatment is confined to frequent washing of the external wound. In the 'Obstetrical Transactions of Edinburgh' for 1883 Dr. Felkin gives a full description of a successful performance of Cæsarian section by native operators he actually witnessed in Uganda. A young primipara, who had been some little time in labour, was laid on her back on a native couch, and fastened down by bands around her thorax and legs. She had previously received a large dose of banana wine, which had rendered her hopelessly intoxicated. The operator stood on the left side of the patient with a knife in his right hand, and murmured an incantation. He then washed his hands, the knife, and the patient's belly, first with banana wine—and subsequently with pure water; uttered a loud cry, answered by the assembled multitude without, and with one cut divided the entire abdominal wall in the mid-line from the pubes to the umbilicus. The edges of the wound were held apart by assistants, and bleeding checked by an application of the actual cautery. The uterus was then incised, the child removed and, the cord being cut and compressed, given to a special assistant. The knife was then laid aside, and the uterus rubbed with the fingers until it contracted; the placenta was then peeled off by the fingers of the right hand, and all clots washed out of the uterus with clean water.

The sides of the cut in the uterine wall were pressed together, and the uterus again kneaded; no stitches were inserted. During this time a special assistant had prevented the escape of intestine or omentum through the abdominal wound, the edges of which were now brought together, and fastened by the insertion of seven large well-polished iron nails, round which strips of bark cloth were bound in a figure of eight. The dressings consisted of a layer of banana leaves, a fomentation, more leaves, and a broad bark-cloth bandage. The patient had recovered from all shock an hour after the operation, and in another hour the child was put to the breast. The temperature the next day was 99° F., on the second night 101° F., with a pulse of 108, thence falling to normal. The dressings were changed on the third morning, and thence on daily. The needles were removed on the fourth, fifth, and sixth days, after a little suppuration round the points of insertion. On the eleventh day the wound had healed, and the patient got up

and returned to work on the fourteenth day, the subsequent history being quite satisfactory.

The origin of trephining is lost in the mists of antiquity; it certainly was frequently practised in Europe during the neolithic age.

Skulls from the south of France, Portugal, Belgium, Switzerland, Germany, Russia, and elsewhere bear witness both to the operation and to the fact that it was sometimes successful. Similar evidence from Algeria, the Canaries, North America, and Peru show how wide-spread the custom was among neolithic man. Trephined skulls of the bronze period have been found in Scotland, France, and ancient Egypt. Explorers of all periods from the middle ages to the present day give accounts of having seen the operation performed. Ella in the *Medical Times and Gazette*, vol. i, 1874, describes the procedure as he actually witnessed it in the South Pacific.

"A notion prevails there that headache, neuralgia, vertigo, and other cerebral affections proceed from a crack in the head, or the pressure of the skull on the brain. The remedy is to lay open the scalp with a cross or T-shaped incision, then scrape the cranium gently with a shark's tooth, or, as is the more modern custom, with a piece of glass, until a hole is made into the skull down to the dura mater. In the best hands about half of those who undergo the operation die from it. These same islanders employ bone-scraping as a treatment for rheumatism in old people. The cuticle is incised longitudinally, and the ulna or tibia laid bare, then the surface of the bone is scraped until a large portion of the external lamina is removed."

Mr. Ella says, "I have never found anyone who underwent this operation that said it had been efficacious in the object sought." Strange to say, from all the varied accounts of this operation and its sequelæ which we possess we have no notice of any septic infection taking place. Savage and prehistoric man selected very various spots as the best region for operation; most, however, chose the parietal region. As Cartailhac points out, in all times surgeons seem to have respected the part of the cranium not covered by hair, without doubt from æsthetic reasons. It is evident from the appearances of prehistoric skulls that the wounds could not have been produced by a single blow from any known weapon of the period, and many skulls show various incomplete stages of the operation, possibly because it was abandoned on the death from pain and exhaustion of the patient. Bethencourt described the operation in the Canaries as lasting many hours.

In the Aures the operation is performed as follows, according to Dr. Vediennes:—A semicircular flap of scalp is defined by one cut with a knife, then raised by the fingers and a wooden lever, separating pericranium from bone. An area of bone is then marked out by a small series of holes drilled by a pointed bronze or iron rod through the bone, any large projection being cut off with a saw. A dressing of butter, honey and saffron is then applied, covered by resin and fomentations of herbs. Twenty-four days later (the dressing having been changed every day) the piece of bone is removed by a crochet. If then the surface of brain is seen to pulsate, all is held to be going well. If, on the other hand, the pulsations are not seen, the wound exhales an evil odour, and the surface of the brain is blackish grey, the prognosis is grave, and special treatment employed. This consists in applying an oil obtained by roasting yolk of egg on a dish. After the final operation, should the patient survive, as often happens, a dressing of pure honey and the milk of a woman who has prayed to their gods is applied as before. Hæmorrhage is checked by the actual cautery at a dull red heat. The operation is usually performed for fracture of the skull, and is at once exploratory and curative. The cicatrices left are white, smooth, often depressed, and of an irregular outline; they are usually kept covered during the remainder of life.

Although this by no means exhausts savage surgery, which in one way or another has, and often attempts with fair success, to deal with the same problems as our own, considerations of space and time set a limit to their further notice. Savage midwifery is too large a subject to be considered at present.

Nasal Diphtheria masked by Measles.

By WILLIAM WYLLYS, M.R.C.S.Eng., L.R.C.P. and L.S.A.Lond.

THE following notes of a case of post-diphtheritic paralysis following an attack of measles, associated with muco-purulent nasal catarrh, the origin of which was not detected at the time, I deem of sufficient interest to record.

The patient, a boy æt. 5 years, had been under my care suffering from a typical attack of measles, his little sisters, aged three and two years respectively, being at the same time similarly affected. The only suspicious circumstance was the protracted and obstinate nature of the nasal catarrh in all three cases, which was purulent, and in the case of the elder girl had existed for two weeks prior to the appearance of the measles rash. In no instance was sore throat complained of, nor was any membrane found in the fauces. The two girls made a perfect and permanent recovery, but the boy, about a week after the subsidence of all symptoms and signs of measles, became so weak and debilitated that I ordered him back to bed; in a few days, however, he appeared better, and was allowed to get up; and, as the weather was fine, was able to go out of doors about a week later, when he walked to my house, though still obviously weak. Ten days afterwards his father carried him up, as he said the child seemed to have lost the use of

his legs, toppling about when he tried to walk, and that he dropped his head to the left, and that his manner seemed curious. I accordingly once more ordered him to bed, and on my visit next day found he had a cough of a clashing, hollow character, which was quite ineffective in bringing up any phlegm, though, after repeated paroxysms, he retched and expelled mucus and food through his nose. My suspicions being aroused, I examined the palate, and found it paralysed, as were the muscles of extraordinary expiration; the patellar tendon reflexes could not be elicited, and the pupils were dilated and sluggish to the action of light, his expression was vacant, and there was internal strabismus (left).

Bronchitis supervened, and though of itself not of a serious character, was rendered so by the impaired expiratory powers, and the boy's condition soon became critical, the repeated paroxysms of cough coupled with the sitting posture occasioned by orthopnœa telling severely upon the circulatory system. Grave fears were entertained lest, the cardiac nerves becoming involved, death from syncope would ensue; fortunately this did not happen.

Gradually increasing doses of liq. strych. ℥ij, and liq. ferri perch. ℥iv three times a day, and friction of chest muscles with camphorated oil so improved the child's condition, that in three weeks he could sit up comfortably in bed and play with his toys. Two further attacks of catarrhal bronchitis occurred, and, though obstinate, were satisfactorily dealt with by stimulant expectorants and the use of a steam kettle. The boy's hearing was markedly impaired on both sides during convalescence, but gradually improved, as did his power of deglutition and the twangy nature of his voice.

As paresis of the chest muscles persisted, the legs were much wasted, and the knee-jerks still absent at end of six weeks, I prescribed massage to be employed for thirty minutes, followed by application of the galvanic current, which was done for a fortnight, a striking and rapid improvement soon becoming manifest in his respiratory movements, and in the size and power of his lower limbs, the child being enabled thereby to walk a little, though the gait was of a tottering character.

A year has elapsed; the boy now enjoys fair health except for occasional bronchitic attacks, he walks and runs well, hears naturally, speaks with but a slight nasal twang, the thoracic movements are good, the knee-jerks have returned, though only in a minor degree, and the strabismus is only obvious when he is over-tired.

The chief interest in this case centres in the fact that the patient undoubtedly had nasal diphtheria coincidently with measles, and that, although his sister had a far worse purulent nasal discharge both during and before her attack of measles, she developed no post-diphtheritic signs. The rarity of the concurrence of diphtheria with measles is my excuse for publishing these notes, and I trust accounts for my failure to detect the condition of mixed infection.

The Treatment of Septic Wounds.

An Abstract of a Paper read before the Abernethian Society on November 8th, 1900.

By H. J. PATERSON, F.R.C.S.

SEPTIC wounds, as the result of a surgeon's knife, are, fortunately, now so rare that they need not be considered, so that we have only to deal with wounds the result of accident. It is, of course, impossible to say at the time of the accident whether any given wound is inoculated with micro-organisms or not. For practical purposes we may, I think, assume that the majority of accidental wounds are so infected. Whether the wound suppurates or not depends on the quantity of micro-organisms introduced, and also on the power of the tissues to destroy these invaders. If the micro-organisms are not in vast numbers, Nature may, by means of her trusty henchmen, the leucocytes, utterly destroy them; but—and this is a point on which I venture to insist—mistaken zeal on the part of the surgeon may hasten the very event which he is desirous of preventing. I believe that in many cases too vigorous antiseptic measures actually conduce to suppuration by impairing the resisting action of the tissues, and so hindering Nature's own power of repelling the intruders into her domain. Comparative pathology affords us a suggestive lesson in this matter; for it is a remarkable fact that the wounds of animals, even when severe, rarely suppurate, and usually heal rapidly and without complications. This may be due to some extent to constitutional causes, such as, for instance, the temperateness of animals; for I suppose no one has ever heard of an animal developing delirium tremens after an accident. Nevertheless the determining causes of suppuration in wounds are mainly local; and this rarity of suppuration among the lower animals is at least suggestive.

There are certain general indications for treatment applicable to all wounds, which may be summed up thus:

To search for and remove foreign bodies.
To arrest hæmorrhage.
To cleanse the wound.
Apposition of the wound.
Drainage.
Suturing.
Pressure.

And lastly, but not least important, the truth contained in John Hunter's aphorism, "The first and great requisite for the restoration of injured parts is rest."

These principles and their application are familiar to all of you, and I only propose to discuss two of them, namely, the cleansing of the wound, and drainage, and especially the drainage of acute cellulitis following a punctured or other wound.

For convenience we may classify wounds under four headings—

Incised wounds.
Lacerated wounds.
Contused wounds.
Punctured or other wounds, resulting in cellulitis.

Incised wounds.—About incised wounds little need be said. They are not usually impregnated with dirt, and consequently there are no indications for vigorous wound-cleansing; gentle bathing with some antiseptic is generally all that is required. Occasionally a wire drain may be advisable, but, as a rule, drainage is sufficiently provided for by not suturing the wound too tightly.

Lacerated wounds.—In lacerated wounds the conditions are somewhat different, as such wounds are generally impregnated with dirt. The frequency with which these wounds suppurated, in spite of the most rigorous antiseptic measures, was the occasion of much perplexity and disappointment to me during part of the time I was Mr. Willett's house surgeon. Lacerated scalp wounds more especially, suppurated with a pernicious regularity. Two cases, both of which were admitted during the same period of duty, made a great impression on my mind, and set me thinking. I will very briefly record them.

The first case was that of a man who was thrown out of a dog-cart in a street collision. He had a lacerated wound on the left side of his head, a flap of the scalp extending from the external angular process to the occipital protuberance being torn down for a distance of three inches. There was much mud in the wound, and I spent over an hour, with the patient under an anæsthetic, in thoroughly (as I thought) cleansing the wound. The flap was replaced and kept in place by a few sutures, and free drainage provided at the most dependent part of the wound. Nevertheless the patient's temperature gradually rose, and there was free suppuration, which extended beyond the limits of the original wound, and required free incisions.

The second patient was a boy aged ten, who was knocked down by an omnibus, the vehicle passing over his elbow, causing an extensive lacerated wound involving the joint. In spite of careful antiseptic treatment, free suppuration ensued, leading to sloughing of a considerable area of the skin. Both cases were very disappointing. Antiseptic treatment quite failed in each case. I would readily have believed that these failures were due to some want of care or mistake on my part, but I so frequently saw the same sequence of events in the practice of others that I was forced to believe that such was not an adequate explanation. I well remember about this time seeing a woman admitted into the hospital with a lacerated wound of the leg. The house surgeon took every precaution and care in *thoroughly* removing the dirt and mud from the wound, yet there followed free and extensive suppuration, and eventually the limb had to be amputated above the knee. I wondered what would have occurred in these cases had Nature been left more to her own resources. There can be little doubt that the scrubbing necessary to remove the dirt from such wounds as I have described must seriously impair the resistance of the tissues. I determined, therefore, when next I had an opportunity, to try less vigorous measures, and to trust more to the *vis medicatrix naturæ*. I had not long to wait, for during Mr. Willett's next period of duty a man was admitted who had been knocked down by a truck on the railway, and sustained a very similar scalp wound to the one already described. On this occasion no anæsthetic was given (the patient had internal injuries, which would in any case have rendered the giving of an anæsthetic inadvisable), but the wound was simply bathed with perchloride of mercury lotion, and the flap maintained loosely in position with two loosely tied sutures. Rather to my surprise, the wound rapidly healed, with only slight suppuration from granulation tissue at its margin. Nature seemed to justify the confidence reposed in her. After that experience I avoided any attempts at thoroughly cleansing lacerated wounds, and never had occasion to repent so doing. It is true that suppuration in lacerated wounds was not abolished, but it was indubitably less frequent, and when it did occur was comparatively trifling. I venture, therefore, to suggest that it is inadvisable to aim at thorough cleansing of a dirty lacerated wound, and that any vigorous attempt—and the attempt must be vigorous if there is much dirt in the wound—at thorough cleansing will probably do more harm than good, by impairing the resistance of the tissues to the micro-organisms which remain. It will, I think, be admitted that to ensure the removal of all organisms and foreign matter is practically impossible. Were it possible, the case would be different, as then the resisting power of the tissues would be of less moment than the removal of all foreign matter. As the case stands, there are two alternative conditions before us, and we have to determine which of the two is the lesser evil,—

1. Presence of dirt (micro-organisms), but unimpaired tissue resistance.

2. Less dirt (fewer micro-organisms), but impaired tissue resisting power.

From my own experience, I incline to the view that the presence of more foreign matter, but with unimpaired tissue resistance, is the more favourable condition. A similar view is now generally held with regard to septic matter in the peritoneal cavity. The practice of "washing out" the peritoneal cavity is far less often resorted to than formerly, as it is more recognised that it is impossible to thoroughly cleanse the peritoneal cavity by flushing. Now many surgeons, after removing the more visible pus by gentle sponging, prefer to leave the remainder inside the abdomen rather than risk injuring, and so impairing the resisting power of, the peritoneal membrane by prolonged flushing of the cavity with water or antiseptics.

I trust I have made my meaning clear. I am not for one moment attempting to under-estimate the value of judicious antiseptic treatment, but simply questioning the advisability of prolonged attempts by scrubbing or strong antiseptics to thoroughly rid a lacerated wound of all foreign matter, when, from the nature of the wound, such an ideal is practically impossible of attainment.

On one other point I wish to lay emphasis, and that is the importance of trimming the edges of the wound with scissors. This simple precaution in itself removes much of the dirt, and tends to facilitate rapid healing, without in any way injuring the resisting power of the tissues.

Of contused wounds I have nothing particular to say, and so will pass on to the consideration of wounds which have resulted in cellulitis, and mention a few points in connection with the treatment of this condition.

Cellulitis is apt to occur in punctured wounds, or in wounds that have been neglected in broken-down, and especially in alcoholic subjects. Three main varieties of cellulitis following wounds may be described:

1. Acute localised cellulitis.
2. Acute œdematous cellulitis.
3. Acute (subacute) spreading cellulitis.

The general objects of treatment in these several varieties are similar, and are fourfold in number, viz.:

1. To arrest the progress of the inflammation.
2. To relieve tension.
3. To maintain free drainage.
4. To prevent constitutional infection (sapræmia, septicæmia, and pyæmia).

The clinical course of these varieties are somewhat different, so that I will briefly allude to each.

1. *Acute localised cellulitis.*—This is the common acute abscess, and by far the commonest variety. The treatment is simple. A free incision to let out the contained pus, and careful after-dressing, usually speedily ends the trouble.

2. *Acute œdematous cellulitis.*—This usually results from the introduction of a specially virulent poison, which very speedily causes a brawny, œdematous swelling. If incisions be made no pus is discovered, but only blood-stained serum. Such cases run a very rapid course, and the patient may die within two or three days from septicæmia. No treatment seems of any avail.

3. *Spreading cellulitis.*—In this variety the process, although at first possibly acute, tends to assume rather a subacute or even chronic type. When the case comes under observation there is a more or less extensive area of dull red, unhealthy-looking skin. Fluctuation is readily detected in the affected area. There is little or no œdema, and signs of acute inflammation are absent. When an incision is made there is found a cavity containing pus, and the skin is thinned, and may be undermined more extensively than the external appearances would lead us to suspect. Notwithstanding incision, the undermining of the skin at the periphery may continue, while the skin in the centre of the area gradually melts away, the pus tends to collect in pockets under the skin, decomposes, and the patient will be in danger of becoming poisoned from the absorption of the products produced by the decomposing pus. This is, perhaps, the most troublesome variety of cellulitis to treat; but I believe that in many cases the reason is that the incisions made in the first instance are not sufficiently extensive. Let me record two illustrative cases. A man aged 56 was admitted with cellulitis of the lower limb. Three weeks before admission he had slipped and sustained a wound on the outer aspect of the knee. Pain and swelling followed shortly afterwards, and two weeks later an incision was made from which there was a copious discharge of pus. The swelling continued to spread up and down the limb, and on admission the skin was reddened and undermined down the upper third of the leg, and up the thigh to within four inches of Poupart's ligament. Under an anæsthetic I enlarged the original incision, and made further incisions in the leg, on the inner aspect of the knee, and on the outer aspect of the thigh. All the incisions were drained. The cellulitis continued to spread, so two weeks later all the incisions on the outer side of the limb were connected, forming one long incision. Still the undermining of the skin continued, so that, as a last resort, the whole of the undermined skin was cut away right to the margin of the cavity, leaving a large ulcerating surface extending from Poupart's ligament, and the iliac crest, exposing Scarpa's triangle as in a dissection, and extending down the outer side of the thigh as far as the middle of the leg, and averaging about five inches wide. Nor was it a mere superficial wound, as the femoral vessels could be plainly seen therein, and on the outer side of the limb the vastus externus and biceps femoris muscles were exposed. No further extension of the cellulitis ensued, and the large ulcer was treated in the way to be presently described. The other patient was a woman who was admitted with a small patch of cellulitis following injury on the outer side of her leg. An incision and counter-incision was made, and the cavity drained. The cellulitis

continued almost imperceptibly to spread, slowly but surely undermining the surrounding skin. On nine subsequent occasions, under nitrous oxide gas, I made more incisions, and inserted more drainage-tubes, until the patient's leg had rather the appearance of Medusa's head. Finally, one long incision was made from end to end of the affected area, and the flaps of undermined skin were turned back, discovering numerous pockets of the most offensive pus I have ever smelt, except perhaps in cases of fæcal abscess. The whole of the undermined skin was cut away. After this radical treatment there was no further spread of the cellulitis, and the large ulcer resulting was treated in the way to be detailed presently. These two cases are, I think, typical of what so frequently happens in cases of cellulitis. Unless very free exit is provided for the pus, it collects in pockets, gradually undermines more and more skin, decomposes, and so causes sapræmia. In my opinion the usual treatment of these cases by incision and counter incision, or by multiple small incisions, does not as a rule provide adequate drainage, and I maintain that the best, and in the long run the quickest plan, is to open up the abscess cavity from end to end, and by cutting away all, or at any rate most, of the undermined skin to convert the abscess into an ulcer. I admit that this sounds very severe treatment, but we must bear in mind that in many of these cases it may come to the question of the patient losing a limb, or even life itself; so that heroic treatment, if it obviates these eventualities, is amply justified. But even so, this treatment is not so severe as appears at first sight, when we realise that the resulting ulcer can be completely covered over by means of Thiersch's grafting. This was done in both the cases above described. The ultimate result is a more useful, soundly healed, limb, and a more ornamental one, than if the cellulitis had been treated with multiple incisions and drainage-tubes, which leave many puckered scars. Thiersch's grafting is not a difficult operation, and is one of great value in the treatment of large ulcers. Success depends on strict attention to details, and on the exercise of considerable patience. As the technique has not, so far as I know, been fully described in any of the ordinary text-books, I think I cannot do better than conclude these disjointed remarks by giving a brief account of the method of performing this operation which after trial of various modifications I have found most satisfactory.

Two conditions are important for success: first and foremost the ulcer must be situated in a region where very firm pressure can be applied over the grafts; and secondly, the ulcer should have commenced to heal.

For convenience of description I will describe the procedure under three headings:

(1) Preparatory treatment.
(2) The performance of the grafting.
(3) The after-treatment.

1. *Preparatory treatment.*—The first step is to get the ulcer clean. The surrounding skin is shaved, and the whole ulcer and surrounding skin thoroughly washed with soap and water. For a day or longer I recommend the use of Sanitas fomentations, frequently changed. They are of much value in getting the ulcer clean and sweet. Twelve hours before the time fixed for the grafting the whole region should be again thoroughly washed, the skin being rubbed with ether, bathed with biniodide of mercury lotion, and enveloped in sterilised lint or gauze wrung out in hot carbolic lotion (1 in 30), and covered with protective and bandaged. At the same time the skin from which the grafts are to be taken should be prepared by shaving, thorough washing with soap and water, then with ether, and finally with biniodide of mercury (1 in 2000) lotion. It is then covered with a dressing similar to that placed on the ulcer. The flexor aspects of the forearms are the most suitable regions from which to take the grafts, the skin there being fine, comparatively free from hairs, and easily kept on the stretch while the grafts are being cut. If more grafts are required than can be obtained from these regions, they may be taken from the extensor aspect of the thighs.

2. *The performance of the grafting.*—The instruments required are a Volkmann's spoon, two pairs of dissecting forceps, a probe, a pair of scissors, and a knife with which to cut the grafts. I have found the knife known as Thiersch's work admirably. It should be sharpened after each occasion on which it is used. A razor has not sufficient weight to give it the steadiness necessary for cutting large grafts.

The patient having been anæsthetised, the ulcer is finally prepared for receiving the grafts. The whole of the superficial flabby part of the granulation tissue on the base of the ulcer is scraped away with a Volkmann's spoon. It is advisable at the same time to scrape away the thin blue epithelial film at the healing margins of the ulcer. The whole surface is then scrubbed with a sterilised nail brush and soap and water. This prepares a level bed upon which to place the grafts. Finally, after free irrigation with hot biniodide lotion, the surface is sponged dry and enveloped in guttapercha tissue or protective, which has been kept for a few hours in carbolic lotion (1 in 20) and dipped before application in hot saline solution. Firm pressure is then applied by means of a bandage. This arrests the hæmorrhage. If this be not effectually done, when the grafts are applied blood will collect between them and the surface of the ulcer, with the result that the grafts will die. Guttapercha tissue is placed in immediate contact with the ulcer in preference to sponges or gauze, as it does not tend to stick to the granulations, and thus start the bleeding afresh when it is removed. The operator should now again thoroughly disinfect his hands, and for the rest of the operation antiseptic lotions should be avoided, as the chemicals might injure the delicate grafts.

In cutting the grafts the skin must be kept *tightly* on the stretch in the *long* axis of the limb by an assistant. This is most important. The operator then stretches and flattens the skin from side to side while cutting the grafts with the knife in his right hand. The grafts should be cut with a somewhat sawing motion, the handle of the knife being manipulated so as to make the blade follow the contour of the limb. In this way grafts may be cut measuring two and a half inches wide, and, if necessary, five inches long, or even longer if the limb be a large one. While cutting the knife should be kept wet with hot saline solution (one teaspoonful of common salt to a pint of hot water), and each graft as it is cut should be placed in a bowl of the same solution at a temperature of from 98° to 100° F. In cutting the grafts care must be taken not to cut too deeply, otherwise scarring will ensue. The part removed should consist of the whole of the horny layer, and the superficial part of the Malpighian layer of the skin, the tops of the papillæ being just removed, so that a surface covered with minute drops of blood is left, each drop corresponding to a cut papilla. With this precaution there will be absolutely no scarring; in fact, after a time the same place may be utilised for the providing of other grafts. The part from which the grafts have been taken should then be sponged with biniodide lotion and dressed with antiseptic gauze. This dressing may be left untouched for a couple of weeks, by which time the surface will have usually quite healed.

All the grafts required should be cut, and the part from which they have been taken covered up previous to removing the temporary dressing which has been placed on the ulcer to be grafted. I wish particularly to emphasise this point, as several writers have advised that each graft should be transferred directly it is cut on the knife to the ulcer. If this be done there is great risk of infecting the raw surface from which the grafts have been taken with some of the pus from the ulcer. In this way I myself have seen ulceration ensuing over an area more extensive than that of the ulcer for the cure of which the grafting was undertaken. As additional reasons for cutting all the grafts at once it may be remarked, that a longer time is thus allowed for pressure to be exerted on the ulcer after it has been prepared by scraping, consequently the hæmorrhage is more likely to be completely arrested, a condition most essential for success, and that when the grafts are placed in position as they are cut there is much more likelihood of those already placed *in situ* being disturbed by the manipulations incidental to the cutting of further grafts. The vitality of the grafts is effectually preserved for an hour or even more if the temperature of the saline solution be maintained by the addition of hot water.

Grafts from a freshly amputated and healthy limb may be used instead of grafts from the patient. This is of especial service if the patient's condition be such as to render a long operation under an anæsthetic inadvisable. The scraping of the ulcer may be accomplished while the patient is under the influence of nitrous oxide gas, and the actual placing of the grafts quietly finished without an anæsthetic. I have several times adopted this procedure with success.

The next step is the placing of the grafts in position. The dressings having been removed, the ulcer is surrounded with sterilised towels. The grafts are removed one by one from the saline solution with a pair of dissecting forceps, and spread out on the ulcer, raw surface undermost. If it be remembered that the grafts always curl up *towards* the raw surface, no difficulty will be experienced in spreading them out correctly. Round the margin of the ulcer the grafts should overlap the skin for about one eighth of an inch. Over the base of the ulcer the grafts should be placed in close contact, no intervening islets of granulation tissue being left. The

grafts must be completely uncurled and evenly spread out. For this purpose I have found no instruments answer so well as two pairs of dissecting forceps, aided by a probe. The grafts should be handled with the utmost gentleness, and no air or fluid should be allowed to remain between them and the floor of the ulcer. This is the most tedious and tiring part of the operation, and requires much care and patience. Any attempt at hurrying will probably result in the displacement of some of the grafts already placed in position. If the ulcer be large. or the discharge profuse, it may be advisable to divide it into several smaller ulcers, by placing several broad grafts across it. The intervening ulcers may be covered in at a later period, when the first grafts have become vigorous. This plan was adopted in the first case recorded above.

Some authorities have advocated stitching the grafts in position. This is quite unnecessary, and would greatly lengthen an already prolonged operation.

Next as to retaining the grafts in position. As already insisted upon very firm pressure is most essential for ensuring success. The grafts having been placed in position they are covered with strips, two inches wide, of isinglass plaster, each strip being first dipped in hot saline solution, and then firmly applied over the grafted area. Over each of these strips a piece of antiseptic gauze of similar size is placed, and kept in position by a strip of Leslie's strapping of sufficient length to get a firm hold on the skin beyond the ulcer. The strapping is best heated in the flame of a spirit lamp; this makes it stick better, and at the same time sterilises it. Over the plaster is laid a thick layer of wool, and the whole part firmly bandaged with a Domette bandage. If the part grafted be a limb, it should be slightly raised for the first few days. If the ulcer is near a joint, this must be securely fixed by some splint.

3. *The after treatment.*—The dressing should be left undisturbed for at least four days, but if there be no rise of temperature, no discharge through the dressings, the first dressing may be advantageously postponed until the fifth or sixth day. I prefer to let the gauze and isinglass plaster soak off unaided, by placing the part or if necessary the patient, in a hot bath, having first of all removed the bandage and wool, and loosened the Leslie's strapping. In a successful case the result may at first sight appear to be a failure. The grafts are now pinkish or red in appearance, and the granulation tissue below shows through them, so that their presence is not very evident. If the grafts are conspicuously white, we may be certain that they are no longer living. If the grafts are living, the dressings are applied as before, except that the Leslie's strapping may now be dispensed with. After ten days an ordinary dressing of gauze and wool is sufficient.

In my opinion the very satisfactory results obtainable by grafting in this way remove the chief objection to the treating of cases of spreading cellulitis in the way I have suggested.

Irreducible Inguinal Hernia.

An Abstract of a Paper read before the Abernethian Society,

By W. McADAM ECCLES, M.S., F.R.C.S.

GENTLEMEN,—It is my intention to-night to briefly review the present position of opinion with regard to the treatment of irreducible inguinal hernia.

Irreducibility of a hernial protrusion is a term that requires a careful recognition, for the safety of the patient depends to a great extent upon the value put upon the definition.

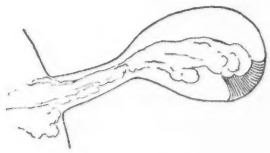
When the contents of a hernial sac do not return of their own accord when the patient assumes the horizontal posture, and are not reducible on the application of taxis either on the part of the patient himself or of the medical attendant, but at the same time there is no other usual condition present within the sac, then the case may be said to be one of simple irreducibility.

This state of the parts has to be carefully distinguished from the irreducibility associated with an interference with the circulation of blood in the bowel wall, or obstruction of the lumen of the gut. Such conditions would be either strangulation or incarceration, and not simple irreducibility.

It is well to remember also that irreducibility may be merely a temporary condition, for a hernia that is irreducible to-day may be reducible to-morrow, and one that is irreducible in the hands of one surgeon may be returned by the efforts of another.

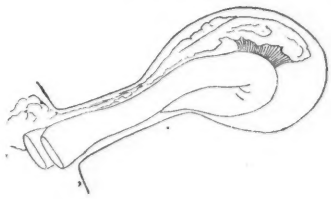
To understand aright the treatment of irreducible inguinal hernia it is necessary to indicate the causes of simple irreducibility.

FIG. 1.



The contents of a hernial sac become irreducible from one of three reasons. Adhesions may tether the contents within the sac, or render the contents too large to return through the aperture of exit, or put obstructions in the way of reduction. Adhesions are, therefore, of the contents to the sac wall, of the contents to themselves, or of different parts of the sac wall to each other (see Figs. 1, 2, and 3).

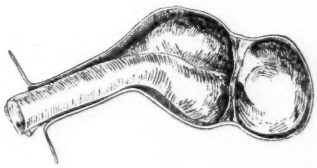
FIG. 2.



The contents after protrusion may increase in their bulk, and consequently become unable to return through the opening leading into the abdomen. This increase may be brought about by the deposition of fat, by the addition of fibrous tissue, or by the formation of cysts or new growths in the viscera within the sac.

The neck of the peritoneal pouch containing the protruded organs may become narrowed after their descent, and thus the way back into the abdomen rendered so constricted that the viscera cannot be induced to return.

FIG. 3.



It is rare for an incomplete inguinal hernia to be the seat of imprisoned contents, but, on the other hand, it is common for a complete hernia to have its interior filled with viscera which will not go back into their normal abode.

The signs and symptoms as well as the diagnosis of an irreducible inguinal hernia do not concern us at the present time, and we pass on to the all-important question of the rational treatment of such a condition.

To return the contents of the sac and to prevent their further protrusion should obviously be the aim of the surgeon. The ideal method in which to obtain this satisfactory result is to perform herniotomy, to reduce or remove the contents of the sac, and to close the mouth of the pouch of peritoneum and the apertures through which it has passed.

Operation is therefore indicated in the large majority of cases of irreducible inguinal hernia. It is nearly always advisable in the somewhat rare irreducible bubonoceles, and in many, even large, scrotal herniæ. There are, however, a considerable number of cases in which it is sheer madness to attempt an operation, but in which much may be done by properly applied palliative means.

It is not my intention to discuss all the points that arise in connection with a radical operation upon an irreducible inguinal

hernia, but I think that it might be useful to allude to a few of the important details. First as to the position in which the incision is to be made. It should be placed, even when the sac has advanced into the scrotal tissues, over the line of the inguinal canal,—that is, it should commence at or a little outside the site of the deep abdominal ring, and extend to the superficial ring. The aponeurosis of the external oblique muscle will then be exposed, and its fibres are divided over the line of the canal, thus opening up that passage. Within it will be found the neck of the sac. This is next dissected free from the coverings that lie superficial to it. It is then carefully opened, so that no damage may be done to the structures that lie within it. Omentum, as a rule, and less frequently intestine, occupy the neck of the sac. The omental tissue may present itself as quite a narrow band, easily unravelled, or a thick cord densely compressed may be present. The omentum is to be discreetly displaced, and a search made for any bowel hidden behind it or even within it.

Whether bowel is found or not to a great extent determines the next step in the operation. If gut is prolapsed, in most cases it is not adherent, and with a little manipulation it can be reduced.

Should adhesions exist, then the case becomes one of great difficulty, for the separation of the intestine may be a hazardous measure if the connections that tether it are firm. It may become necessary to leave a portion of the sac wall attached to the bowel, and reduce it with the gut rather than risk injury of the intestinal wall by persistent efforts to separate it. The intestine, if any is present, having been returned, it is the turn of the omentum to be dealt with. If feasible, this should be unravelled and ligatured with interlocked silk ligatures as close to the site of the deep abdominal ring as possible. In order to effectively carry this out, it may be needful to separate adhesions, but it is not so very frequent to find them in the neck of the sac. When the omentum has been securely tied, it is divided below the ligatures, and the stump, if bloodless, returned within the abdomen.

The contents of the scrotal portion of the sac now require attention. By pressure upon them, and some traction on the part lying in the neck, the omentum, even if adherent, may be made to present at the wound, the tissues of the sac being often thereby inverted. As a rule it is not advisable or necessary to remove the scrotal portion of the sac, but merely to separate the usually adherent omentum and arrest any hæmorrhage, and to then return the peritoneal pouch into the tissues of the scrotum. The neck of the sac is now carefully separated from the cord lying behind it, and transfixed with a silk ligature flush with the parietal peritoneum at the site of the deep abdominal ring, and the distal portion cut away.

The next step in the operation is the insertion of sutures to bring the arching fibres of the internal oblique and transversalis muscles into contact with the posterior surface of Poupart's ligament. Personally I prefer to use silk for these buried sutures, and to leave the spermatic cord in its normal position, that is behind the internal oblique, instead of transplanting it in front of that muscle, or even in front of the aponeurosis of the external oblique. Two or three stitches are usually sufficient to effectively close the space which has been made apparent by the dilatation of the inguinal canal in consequence of the presence of the hernial protrusion. Next the aponeurosis of the external oblique is sutured with interrupted silk stitches, and finally the skin and subcutaneous tissues are brought together by interrupted sutures of silkworm gut. It will be observed that the three tiers of sutures are not directly one behind the other, so that their disposition also aids in the strengthening of the part.

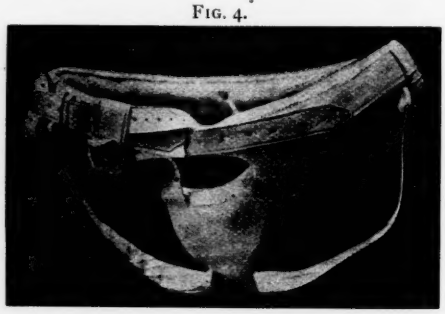
As to the use of a truss after such an operation upon an irreducible hernia, my experience is that it is advisable to order one, at any rate for a year or so subsequent to the operative procedures.

These cases occur often in men whose work is very laborious, or in subjects who are affected with a marked tendency to the production of a hernia, and in many who are very careless of the way in which they manage their hernial protrusions.

Passing now to those instances—and unfortunately they are by no means uncommon—in which an operation for the relief of the hernia is out of the question on account of severe lung or other visceral trouble, or in which the age and general condition of the patient contra-indicate a successful or safe operation. If one has to deal with an irreducible hernia in such a person, it is altogether inadvisable to leave the protrusion alone, a plan that is so often followed. Also it is not good surgery, except in a few special cases, to adjust a so-called bag truss, which is merely a false security, having no power to prevent the descent of further viscera, or to promote the return of those already prolapsed.

There is, however, a truss which has properties that make it of great advantage in the treatment of these irreducible inguinal herniæ. This is the hinged-cup truss. It will be seen by the figure (see Fig. 4) that it consists of the ordinary inguinal pad, to which there are added two additional parts; one is the hinged-cup, and the other is the

FIG. 4.



forked-tongue piece. The hinged cup is made up of a triangular frame of metal covered with chamois leather, so as to form a very shallow bag, and it is attached by one of its upper angles to the lower part of the pad by an ordinary hinge, which allows the cup to move only in a direction upwards and backwards. The other upper angle has fastened to it a strap which passes to a buckle placed on the cross-strap. From the lower angle are prolonged two straps, which pass to be fastened to movable buckles on the spring of the truss. The forked-tongue piece projects at the upper and inner angle of the pad, and is prolonged into a strap which is fastened to a fixed buckle at the front of the shoulder of the truss, on the opposite side to that on which the hernia is found.

In adjusting this form of truss the pad rests over the inguinal canal, and tends to prevent the descent of any further viscera, while the hinged-cup is placed over the scrotal portion of the irreducible contents, and from the pull exerted by the under-straps causes a well-marked pressure upon the hernia. This action will promote reduction of the contents, and the further forward the buckles are placed on the spring of the truss the greater will be the pull produced, and the more will be the pressure brought to bear upon the contents of the hernia.

It is interesting to observe what a small amount of discomfort, comparatively speaking, this form of truss gives rise to. The truss has to be worn day and night, and is only to be removed for the purposes of cleanliness. Each morning taxis should be applied by the patient or surgeon. Reduction is effected in varying lengths of time after the adjustment of the truss, but in over 60 per cent. of the cases in which it is used, it leads in the end to the complete return of all the viscera that have been imprisoned in the sac. Proper dieting to reduce fat will also materially aid in promoting reduction. When this happy result has been brought about, it is necessary to apply a correct form of truss in order to prevent further prolapse of omentum or intestine, and the possibility of their again becoming irreducible.

Notes.

SIR DYCE DUCKWORTH has been appointed a Consulting Physician to the Italian Hospital, Queen Square.

* * *

DR. C. RIVIERE has been appointed Pathologist to the East London Hospital for Children, Shadwell.

* * *

MR. T. P. LEGG has been appointed Assistant Surgeon to the Royal Free Hospital, Gray's Inn Road.

* * *

MARITIME SANITARY SERVICE, SUEZ.—Dr. D. Harvey Attfield has been appointed by the unanimous vote of the

International Sanitary Council in Egypt, Medical Director of the Maritime Sanitary and Quarantine Service at Suez. Dr. Harvey Attfield filled one of the three junior positions from 1894 to 1897. He was Medical Officer of Health for Watford from 1898 to 1900. Dr. Harvey Attfield is the son of Dr. John Attfield, F.R.S., who was Demonstrator of Chemistry at St. Bartholomew's from 1854 to 1862, and editor of the *British Pharmacopœia*, 1898. He studied at Bart.'s from 1888 to 1892.

* * *

MESSRS. F. A. BAINBRIDGE and F. C. SHRUBSALL have taken the degree of M.B. at Cambridge University.

* * *

MR. F. A. BAINBRIDGE has been admitted to the membership of the Royal College of Physicians.

* * *

THE following candidates have been successful in the recent examinations for the Indian Medical Service:—J. K. S. Fleming, H. W. Illius, J. W. Illius, E. C. Hepper.

* * *

MR. BUTLIN asks us to point out an error in his Abernethian address, reported in our last issue. Dr. W. S. A. Griffith is President of the Medical Defence Union, not Mr. Victor Horsley, as stated.

* * *

IN the death of Mr. Vernon the Hospital has sustained a deep loss; his figure—so well known to all,—his courtly manner, his kindly words of encouragement, and above all his valued teaching, will be sadly missed. We of a younger generation had learnt to look on him as more than a skilled surgeon or a great teacher, rather as a personal friend; his example alone was enough to make those who worked under him respect his personality, and prize their acquaintance with him. Learned not only in the science of ophthalmology, but conversant with the history and literature of his subject, his demonstrations in the theatre of the eye ward were made for the younger men full of interest, and many a hard fact will be retained in our memories by the picturesque setting that Mr. Vernon was able to give it.

* * *

His favourite books to recommend for the foundations of eye work were Mackenzie, "the French edition if possible;" Donders, the "master of refraction;" and Stellwag von Carion, a selection in which he showed no mean literary as well as scientific discrimination. And of Donders he was wont to add that "he was a man who, approaching his subject with little else than theoretical knowledge, had written the only *practical* work on refraction."

But Mr. Vernon's chief merit in our eyes, commanding, it may have been, even greater respect than his manner or teaching, was his love for and loyalty to his Hospital. "You men did not make the reputation of this Hospital, my generation did not make it, but our forefathers made it many centuries ago, and it is our duty to see that it loses nothing of its lustre in our keeping." How often has he preached this sermon at "Out-patients," when he asked some peripatetic patient why he had deserted other hospitals to come to Bart.'s.

* * *

It was in his treatment of what are to many men trifling complaints that Mr. Vernon stood on a plane by himself, his wealth of resource and unerring prevision rendering the most ordinary corneal ulcer an interesting clinical study. The care which he bestowed on his patients, his first thought always of their comfort, tended to give to his teaching a practical value, which his dressers would learn perhaps later to appreciate, when on the patient's comfort depends the practitioner's bread and butter. And many a worried doctor, and parent too, will bless the day when Mr. Vernon admitted into the wards a howling specimen of intractable photophobia in the young subject.

* * *

His house surgeons will know how any excuse was enough to bring him down seven days in the week instead of six only. His one fear latterly seemed to be that old age would soon rob him of the work he prized so highly; and deeply as we deplore his loss, to him it would have been an impossibility to lead an invalid life without the work and interest in the Hospital in which he was so bound up.

And if the students of his day have caught something of his manner, though all his teaching may be forgotten—that at least will be reflected through generations of Bart.'s men of the future, when the latest scientific discovery is the amusing blunder of a bygone century.

* * *

Conservative in his profession he may have been, but he was never afraid to adopt what was modern on account of its novelty, nor prone to retain what was old for its venerable antiquity. He had eyes for everything, and forgot nothing, even to the family history of a hospital patient whom he had not seen for ten years; and he had a habit, at times a little startling, of giving some so-called "new method" its proper place in history, and reminding us that it had been tried and discredited when the century was young.

* * *

WE regret to announce the death of Mr. Cecil F. Gordon, recently Medical Officer to ss. "Columbia." Gordon fell a victim to phthisis in 1894, but after twelve months' rest and treatment returned to Bart.'s, and qualified in 1896. Since that time he has spent the greater part of the year travelling. He succumbed to his disease at his home in Hampstead, on the 11th of this month.

IT is reported that at a recent meeting of the Abernethian Society Dr. W. J. Collins converted many of the members of the Resident Staff to Progressive principles by his views on the question of "Insanitary Areas" and the "Re-housing of the Very Poor." The affected class were much touched by his sympathetic words, and are now advocating the claims of the L.C.C. to jurisdiction within the City boundaries.

* * *

AFTER the meeting Dr. Collins was seen investigating the Resident Quarters.

* * *

FROM our contemporary the *Westminster Hospital Gazette* we copy the following "fragment from the hitherto unpublished works of MOREORLESSAT HOMER," which seems to shed some light on one of history's shadiest scenes:—" . . . and it came to pass that about the time of harvest a certain soothsayer called DOWÆ arrived at the city; and he spake to the nations, saying:—'Why bow the knee to ÆSCULAPIUS? Am I not mighty in incantation? Come, then, let us found a city, to which I will admit you by immersion, and heal all ills by the same fluid measures; and lest any feel degraded by the holding of menial office, I myself will be CUSTOS PECUNIÆ, and take all the *ūf.*'* . . . And then did he assemble a public meeting, to which all were invited save and except those unfortunate people to whom it pleased him not to grant tickets. But the disciples of GALEN were exceeding wroth, and rose in their thousands, from the temple of GUI and that of the KING, not forgetting picked men LATÆ VIÆ;† and they went to the meeting with trumpets and with songs.

* * *

"But DOWÆ sent messages to the tribes of the BOBBI and PÆLORES beseeching their help, wherefore they came and surrounded the *Atrium* and the *Medici*, fierce conflict ensuing.

"And it came to pass that a wind from the South did much damage to the forces of the charlatan, who were worsted with the loss of the whole of their dignity and the greater part of their temper. Yet certain prisoners, the smallest obtainable, took they, and barbarously subjected them to the ordeal of the Vine; but as to the meeting, behold! it failed.

* * *

"Now, DOWÆ said . . . [*about a page here is undecipherable*] and departed for the North, where certain young men whose minds were . . . [*a blank*] came unto him, and also some others of the opposite sex; and he received these with open arms, and . . . [*the rest is missing*]."

*A rare Roman coin. † Of the BROAD WAY.

Amalgamated Clubs.

RUGBY FOOTBALL CLUB.

ST. BART.'S *v.* PORTSMOUTH.

Played at Portsmouth on November 17th. The Hospital took down a very weak team, and consequently got a bad beating, Portsmouth scoring 2 goals and 4 tries to *nil*.

ST. BART.'S *v.* OLD PAULINES.

Played at Winchmore Hill, and resulted in a win for the Hospital by 1 goal and a try to *nil*. Team:

F. R. Carrol (back); D. M. Stone, T. O'Neill, J. Corbin, C. Cross, W. H. Hamilton (halves); H. T. Wilson, G. H. Adam, F. Harvey, H. E. Stanger-Leathes, J. West, J. M. Plews, R. C. McDonagh, Algernon Ridgeway (forwards).

ST. BART.'S *v.* NORTHAMPTON.

Played at Northampton on November 24th, and resulted in a win for Northampton, chiefly due to the superiority of their three-quarter line, as the Hospital forwards were quite a match for the opposing eight. Although the score against us was rather heavy, the game was by no means one-sided, as nearly all their ties were obtained after long runs from their half-way; they also obtained a very lucky drop and field goal. Our try was scored by Stone, who took advantage of a fumble on the part of their back to score a good try after a long run. Team:

E. S. Marshall (back); D. M. Stone, G. Drury, G. Ellet, N. M. Wilson (three-quarters); W. H. Hamilton, T. O'Neill (halves); A. O'Neill, H. T. Wilson, F. Harvey, H. E. Stanger-Leathes, R. Miller, A. G. West, J. M. Plews, R. C. McDonagh (forwards).

ST. BART.'S *v.* CATFORD BRIDGE.

Played at Catford Bridge on November 20th. The Hospital were fairly well represented and, the ground being in good condition, a good game resulted in a win for the Hospital by 2 goals and a try to *nil*. The first try was obtained by H. Wilson from a tricky pass by Harvey, A. O'Neill being the next to score, after a dash through his opponents, both of these being converted. The final bag was obtained by Neligan after a good run by Stone. The game was remarkable for the way in which the Hospital outlasted their opponents. Team:

E. S. Marshall (back); D. M. Stone, G. Ellet, G. Drury, J. B. Gillies (three-quarters); W. H. Hamilton, T. O'Neill (halves); A. O'Neill, H. T. Wilson, A. R. Neligan, F. Harvey, J. M. Plews, R. Miller, R. C. McDonagh, H. E. Stanger-Leathes (forwards).

HOCKEY.

ST. BART.'S *v.* ROYAL ARTILLERY.

On Wednesday, January 16th, Bart.'s went down to Woolwich to play the return match with the Royal Artillery, and, after a big scoring game, retired beaten by 5 goals to 4.

The ground was very heavy after the frost. The game was throughout very evenly contested. At half-time the score was 3 goals all. On resuming the home team did rather more pressing, and were able to score 2 goals to the visitors one. The goals for Bart.'s were shot by Adam (3) and Nixon (1).

Bart.'s was not fully represented. Adam and Collingridge played very well, the former shot hard, and on several occasions only just missed scoring with some fast shots. Team:

Muirhead (goal); Furber and L. Gray (backs); Murphy, Collingridge, and Cross (halves); H. Gray, Wilmot, Adam, Nixon, and Hallowes (forwards).

ST. BART.'S *v.* KEW.

The Bart.'s team, consisting of ten men, was only moderately represented in this match at Kew. The ground was frosty, but after a fast game Bart.'s won by 2 goals to 1.

During the first half of the game the visitors did most of the pressing, but were only able to score once, through Beckett.

Shortly after the game was restarted the home team equalised, and play became more level, but Beckett again scored for Bart.'s, who won as above stated. The backs defended very well, and Murphy played a good game at half. Team:

Dickson (goal); Fowler and Upton (backs); Hill, Murphy, and A. N. Other (halves); Jackson, Beckett, Nixon, and Hallowes (forwards).

SWIMMING CLUB.

At a meeting of the above Club, held on February 11th in the College, the following officers were elected:

President.—Howard Marsh, Esq., F.R.C.S.

Vice-Presidents.—W. P. Herringham, Esq., M.D., L. P. Thorne-Thorne, Esq., M.D., W. Fay Bennett, Esq, M.R.C.S., L.R.C.P., — Mundy, Esq., F.R.C.S.

Captain.—A. H. Bloxsome.

Hon. Sec.—D. M. Stone.

Committee.—L. B. Scott, C. Dix, W. H. G. Thorne, V. J. Duigan, M. B. Scott, A. M. Amsler, J. G. Watkins, V. Upton.

Abernethian Society.

FEBRUARY 7th, 1901, Mr. G. E. Gask, President, in the chair. Dr. Collins read a paper "On Public Health and Public Office in London." He began by stating that this was the tenth occasion on which he had distracted and wearied members of the oldest medical society in London. Before entering on the subject of his paper Dr. Collins made sympathetic reference to the death of Mr. Vernon, whose house surgeon he had been just twenty years previously. He then went on to trace the growth of public opinion with regard to Public Health from the beginning of the reign of William IV, when the Statute-book contained no general law of sanitary import, except (in so far as this deserves to be counted an exception) the Act providing for Quarantine, down to the present time, with its innumerable Health, Improvement, Medical, and Local Government Acts, all passed during the sixty-four years of her Majesty's reign. He said that he thought that a medical training peculiarly fitted men for public office, and that there was great need for their service and assistance in public councils, and he hoped that a time would come when the medical profession would be as well represented as the sister profession, Law.

He next dealt with the different governing boards of London, passing in review their areas of jurisdiction, their powers, and the public works they control, giving particular account of the three central governing bodies whose jurisdiction extends over the whole area of greater London, viz. the London County Council, the School Board, and the Metropolitan Asylums Board, saying of the last that it furnishes a splendid example of how much good, mingled with some bad, can be effected by a body whose composition and origin were a compromise and a makeshift, and whose continued existence is an anomally. He gave a full account of its constitution, origin, the work it has done, and has at present in hand. He pointed out the lessened mortality due to scarlet fever and diphtheria, and said that, in spite of the recognition of the conscientious objector by the Government, smallpox was almost extinct.

Dealing with the London School Board, he said that, acting on the suggestion propounded some years ago, that much of what passes as stupidity in the board schools is in reality amblyopia due to errors of refraction, had the eyesight of the children coming under its supervision tested, and had also established fifty-three centres where children who were physically and mentally deficient might have the special individual care and attention which they needed.

The last part of Dr. Collins' paper was more especially devoted to an account of the work of the London County Council. He said that amongst other works it has under its control are main drainage, water-supply, and housing of the poor. It has seven Asylums under its care housing over 15,000 lunatics. To the asylum at Claybury is attached a pathological laboratory, where every convenience and appliance is provided for utilising the clinical material which before the last few years had been so wantonly allowed to run to waste.

In conclusion, Dr. Collins said that it had given him great pleasure to return once more to the scenes of some of the happiest evenings in his life.

Before the paper Mr. Paterson showed a very interesting case of a patient on whom he had performed extensive skin-grafting seven years previously.

NEW LAWS OF THE SOCIETY.

Below is the most important of the recent changes made in the Rules of this Society. It will be seen that it refers to the method of election of officers. Minor alterations were rendered necessary by the amalgamation of the Clubs and the incorporation of the Abernethian Society with these, but these are unimportant.

Election (1892 Rule).

X. (*a*) The Officers shall be elected annually from Members of the Society. Outgoing Officers shall be eligible for re-election.

(*b*) The names of Candidates proposed by Members shall be sent to the Secretaries at least *eight* days before the Annual General Meeting, with the names of their proposers and seconders, and shall be read by the Secretaries at the Ordinary Meeting one week before the Annual General Meeting, and afterwards posted on the Notice Board. No nomination after that date shall be valid.

(*c*) The election shall be by Ballot, and the names of all Candidates shall appear on the balloting list.

(*d*) On the day of election some Member appointed by the Committee, and not himself a Candidate, shall attend in the Society's room, between 12.30 and 1.30, to receive the voting papers of such Members as are unable to attend at the evening meeting, and a list of Members who have voted in this manner shall be read out at the evening meeting, when if any such Member be present he shall be requested to withdraw.

Election (1900 Rule).

VIII. (*a*) The Officers shall be elected annually from Members of the Society. Outgoing Officers shall be eligible for re-election.

(*b*) The names of Candidates proposed by Members shall be sent to the Secretaries at least eight days before the Annual General Meeting, with the names of their proposers and seconders, and shall be read by the Secretaries at the Ordinary Meeting one week before the Annual General Meeting, and afterwards posted on the Notice Board. No nomination after that date shall be valid.

(*c*) Only those Members who have attended at least "three" Ordinary Meetings during the preceding twelve months shall be allowed to take part in the Election of Officers.

(*d*) A list of Members who have attended three Ordinary Meetings shall be prepared by the Secretaries, and posted on the Notice Board eight clear days before the Election.

(*e*) The election shall be by Ballot, and the names of all opposed Candidates shall appear on the balloting list

(*f*) On the day of election some Member appointed by the Committee, and not himself a Candidate, shall attend in the Society's room, between 12.30 and 1.30, to receive the voting papers of such Members as are unable to attend at the evening meeting.

Fate.

I DREAMED a dream and I seemed to see
The mystic home of the Sisters three—
Clotho filling the human reel,
Atropos clicking the deadly shears,
Lachesis, who rules o'er the hopes and fears,
The sorrows and joys that we mortals feel,
Sitting aside o'er another wheel.—

I heard the rattling roulette's whirr,
The clattering click of the fateful ball . . .
And I knew that the Fortune lay with her
If Examiners' victims rise or fall.

J. R. R. T.

The Rahere Lodge, No. 2546.

AN ordinary meeting of the Rahere Lodge, No. 2546, was held at Frascati's Restaurant, on Tuesday, February 12th, 1901, W. Bro. Walter Gripper, M.B., W.M., in the chair. Bros. Hepburn and Bokenham were raised to the Third Degree, and Bros. Ware, Whitaker, and Beadles were passed to the Second Degree. A grant of fifteen guineas was made to a professional brother in urgent distress, a donation of one guinea was given to the maintenance of "Our Brother's Bed" in the Home for the Dying, and a sum of twenty guineas was voted to the Royal Medical Benevolent College at Epsom, on the proposition of W. Bro. E. C. Cripps. In consequence of the much-lamented death of H.M. the Queen there was no banquet after the meeting, but a few members of the Lodge dined together informally.

Calendar.

March, 1901.

Fri., Mar. 1.—Sir Dyce Duckworth and Mr. Marsh's duty.
Sir Dyce Duckworth's Clinical Lecture at 1 p.m.
Hichens Prize Examination.
Sat., „ 2.—A. F. C. *v.* Old Eastbournians at Winchmore.
Tues., „ 5.—Dr. Hensley and Mr. Butlin's duty.
Wed., „ 6.—Mr. Marsh's Clinical Lecture at 2.45 p.m.
Hockey *v.* R. M. A. Woolwich at Woolwich.
Thurs., „ 7.—Abernethian Meeting at 8 p.m.
Fri., „ 8.—Sir L. Brunton and Mr. Walsham's duty.
Sir Dyce Duckworth's Clinical Lecture at 1 p.m.
Sat., „ 9.—R. F. C. *v.* Ilford Wanderers at Ilford.
Hockey *v.* Herts County at Winchmore.
Tues., „ 12.—Sir W. Church and Mr. Willett's duty.
Wed., „ 13.—Mr. Marsh's Clinical Lecture at 2.45 p.m.
Thurs., „ 14.—Abernethian Society. Annual General Meeting at 8 p.m.
Fri., „ 15.—Dr. Gee and Mr. Langton's duty.
Sir L. Brunton's Clinical Lecture at 1 p.m.
Examinatoins for Harvey Prize and Kirkes Scholarship and Gold Medal (Paper).
Sat., „ 16.—Hockey *v.* Uxbridge at Uxbridge.
Mon., „ 18.—Junior Practical Anatomy Examination.
Tues., „ 19.—Sir Dyce Duckworth and Mr. Marsh's duty.
Wed., „ 20.—Junior Scholarships. Senior Scholarship.
Thurs., „ 21.—Senior Scholarship (*continued*).
Senior Practical Anatomy Examination.
Fri., „ 22.—Dr. Hensley and Mr. Butlin's duty.
Kirkes Scholarship and Gold Medal (Clinical).
Sat., „ 23.—Hockey *v.* Teddington II at Winchmore.
Tues., „ 26.—Sir L. Brunton and Mr. Walsham's duty.
Fri., „ 29.—Sir W. Church and Mr. Willett's duty.
Sat., „ 30.—Essays for Wix and Bentley Prizes to be sent in.
WINTER SESSION ENDS.

Examinations.

UNIVERSITY OF LONDON.

Intermediate Examination in Medicine.

Entire Examination; Second Division—J. Ferguson, R. Holtby, N. Macfadyen, A. C. A. Van Buren.

Excluding Physiology.—W. C. F. Harland, H. B. Hill, H. A. Kellond-Knight, A. R. Neligan.

Physiology only; First Division.—E. B. Smith, R. J. Waugh, E. C. Williams. *Second Division.*—R. A. S. Sunderland, W. P. Yetts.

Preliminary Scientific Examination.

Entire Examination; First Division.—E. T. Glenny. *Second Division.*—A. A. Abrahams, W. W. Hume.

Chemistry and Physics.—A. Barber, T. W. H. Burne, G. S. Morse.

Biology.—G. J. Eady.

First Examination.—Conjoint Board.

Chemistry.—E. B. Aylward, P. V. Bhatt, R. A. Bowling, C. P. Charles, P. A. Dingle, R. V. Favell, W. R. Favell, W. E. L. Fowler, W. G. Loughborough, J. E. R. McDonagh, F. Weber, C. O. O. Williams.

Practical Pharmacy.—A. H. Bloxsome, G. E. Cathcart, R. J. Douglas, E. S. Marshall, C. V. Nicoll.

Biology.—A. K. Armstrong, J. E. R. McDonagh, J R. R. Trist, E. L. Wright.

Second Examination.—Anatomy and Physiology.

T. Bates, J. A. Bell, S. E. Crawford, S. H. Gibson, V. H. J. Giragosian, T. B. A. Haggard, H. B. Hill, R. Holtby, R. V. G. Monckton, A. P. Salt.

The following have completed the examinations of the Conjoint Board, and taken the diplomas of M.R.C.S., L.R.C.P.:

Blackman, S. S. F., Thomas, A. E., White, F. N., Walker, H., Urwick, R. H., Ross, P. A., Mellor, A. S., Klumpp, E. G., Cope, R., Maclaren, N., Orton, G. H, Home, F. C. H., Compton, A. T., Cathcart, G. E., Jones, Evan, Rastrick, R. J., Waters, A. C. S., Sale, J. C., Whitwell, H.

Appointments.

BROWN, A. B., M.R.C.S., L.R.C.P., appointed House Surgeon to the Bridgnorth and South Shropshire Infirmary.

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DOUGLAS, W. C., M.R.C.S., L R.C.P., appointed Surgeon to ss. "Ajax" (Ocean Steamship Company).

* * *

GANDY, T. H., M.B.(Lond.), appointed Junior House Physician to the Great Northern Hospital, Holloway Road.

* * *

GAYNER, J. S., M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the General Hospital, Cheltenham.

* * *

MALIM, J. W., M.B., B.C.(Camb.), appointed Junior House Surgeon to the Stanley Hospital, Liverpool.

* * *

PEARCE, T. M., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Birmingham General Hospital.

New Address.

W. LANGDON BROWN, 10, Bentinck Street, Manchester Square, W.

Births.

CARRUTHERS.—On December 9th, 1900, at Riverside, Batheaston, the wife of A. E. Carruthers, M.A., M.B., B.C., D.P.H.(Camb), of a son.

STEPHENS.—On January 23rd, at Laingsburg, Cape Colony, the wife of H. W. Stephens, of a daughter.

Marriage.

HAYWARD—ROLLESTON.—On February 4th, at Christ Church, Lancaster Gate, W., by the Rev. H. London, M.A., John Arthur Hayward, M.D., elder son of the late John Hayward, of Rushall, Wilts, to Rosamund Grace, younger daughter of the late Professor Rolleston, F.R.S., of Oxford.